

10/797,788
Examiner's Amendment
Sept. 2005

WHAT IS CLAIMED IS

1. A retroreflector comprising a plastic layer composite including
at least one transparent structure layer,
a protective layer, and

a reflection layer enclosed at a common interface between the structure layer and the protective layer, the reflection layer including a relief structure which is formed by substantially identically shaped three-dimensional structure elements having base surfaces of lateral dimensions in a range of between 1 μm and 200 μm and having side faces which are covered with the reflection layer, the side faces being at an angle of inclination of 45° relative to a free surface of the layer composite,

wherein the layer composite has at least one surface element in which the relief structure is superimposed with a microstructure distinguished by a preferred direction and for influencing the quality of the reflection action of the layer composite, the microstructure in each surface element has a single preferred direction.

2. A retroreflector as set forth in claim 1

wherein the structure layer has a side remote from the reflection layer,

and including

a base film of a transparent abrasion-resistant and tension-resistant plastic material, the base film being joined to said side of the structure layer that is remote from the reflection layer.

3. A retroreflector as set forth in claim 1

wherein the structure elements are arranged non-periodically.

4. A retroreflector as set forth in claim 1

wherein the reflection layer is metallic.

5. A retroreflector as set forth in claim 1

J.P.
9/05